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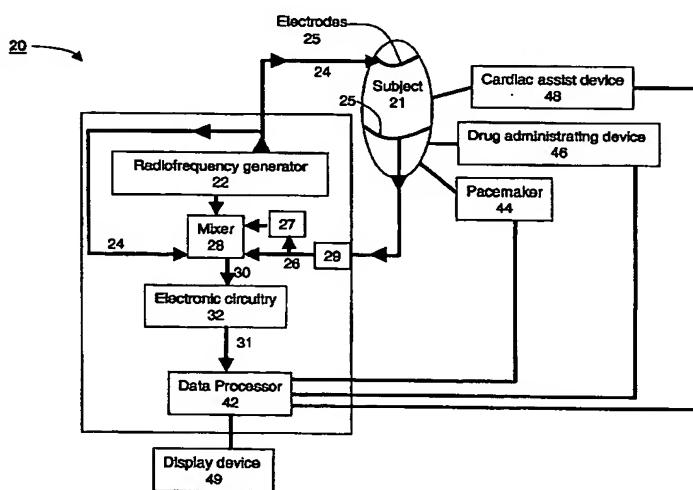
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(54) Title: SYSTEM, METHOD AND APPARATUS FOR MEASURING BLOOD FLOW AND BLOOD VOLUME



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(57) Abstract: A system for measuring blood flow in an organ of a subject, particularly useful for non-invasive cardiac output monitoring (N.I.C.O.M.T.M), the system comprises: a radiofrequency generator for generating output radiofrequency signals; a plurality of electrodes, designed to be connectable to the skin of the subject, the electrodes being for transmitting the output radiofrequency signals to the organ and for sensing input radiofrequency signals of the organ. The system further comprises a mixer, electrically communicating with the radiofrequency generator and at least a portion of the plurality of electrodes, for mixing the output radiofrequency signals and the input radiofrequency signals, so as to provide a mixed radiofrequency signal being indicative of the blood flow. The system further comprises electronic circuitry, constructed and designed to filter out a portion of the mixed radiofrequency signal so as to substantially increase a signal-to-noise ratio of a remaining portion of the mixed radiofrequency signal



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 5/02, 5/04
US CL : 600/372-385,504-507

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 600/372-385,504-507

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,015,393 A (HOVLAND et al) 18 January 2000 (18.01.2000), figs. 1, 2, 4-7, and 20-22; col. 9, line 26-col. 12, line 30; col. 13, line 48-col. 14, line 56.	1,5,8,9,15-23,27-34,38,44-46,50,53,59,61-65,67,71,72
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Y		
X	US 4,094,309 A (GRZENIA) 13 June 1978 (13.06.1978), figs. 1-7; col. 2, lines 32-67.	31-33
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A		
Y	US 6,055,873 A (GOVARI et al) 25 April 2000 (25.04.2000), fig. 2-5B; col. 9, line 64-col. 12, line 67.	4, 37, 49
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A	US 6,413,223 B1 (YANG et al) 02 July 2002 (02.07.2002), entire document.	1-74



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